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FIGURE 1 - The amino acid sequence of native human coagulation Factor VII (SEQ ID NO. 1)

Ala-Asn-Ala-Phe-Leu-GLA-GLA-Leu-Arg-Pro-Gly-Ser-Leu-GLA-Arg-GLA-Cys-Lys-  
5 10 15  
GLA-GLA-Gln-Cys-Ser-Phe-GLA-GLA-Ala-Arg-GLA-Ile-Phe-Lys-Asp-Ala-GLA-Arg-  
20 25 30 35  
Thr-Lys-Leu-Phe-Trp-Ile-Ser-Tyr-Ser-Asp-Gly-Asp-Gln-Cys-Ala-Ser-Ser-Pro-  
40 45 50  
Cys-Gln-Asn-Gly-Gly-Ser-Cys-Lys-Asp-Gln-Leu-Gln-Ser-Tyr-Ile-Cys-Phe-Cys-  
55 60 65 70  
Leu-Pro-Ala-Phe-Glu-Gly-Arg-Asn-Cys-Glu-Thr-His-Lys-Asp-Asp-Gln-Leu-Ile-  
75 80 85 90  
Cys-Val-Asn-Glu-Asn-Gly-Gly-Cys-Glu-Gln-Tyr-Cys-Ser-Asp-His-Thr-Gly-Thr-  
95 100 105  
Lys-Arg-Ser-Cys-Arg-Cys-His-Glu-Gly-Tyr-Ser-Leu-Leu-Ala-Asp-Gly-Val-Ser-  
110 115 120 125  
Cys-Thr-Pro-Thr-Val-Glu-Tyr-Pro-Cys-Gly-Lys-Ile-Pro-Ile-Leu-Glu-Lys-Arg-  
130 135 140  
Asn-Ala-Ser-Lys-Pro-Gln-Gly-Arg-Ile-Val-Gly-Gly-Lys-Val-Cys-Pro-Lys-Gly-  
145 150 155 160  
Glu-Cys-Pro-Trp-Gln-Val-Leu-Leu-Val-Asn-Gly-Ala-Gln-Leu-Cys-Gly-Gly-  
165 170 175 180  
Thr-Leu-Ile-Asn-Thr-Ile-Trp-Val-Val-Ser-Ala-Ala-His-Cys-Phe-Asp-Lys-Ile-  
185 190 195

Fig. 1 (continued)

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Lys-Asn-Trp-Arg-Asn-Leu-Ile-Ala-Val-Leu-Gly-Glu-His-Asp-Leu-Ser-Glu-His-  
200 205 210 215  
Asp-Gly-Asp-Glu-Gln-Ser-Arg-Arg-Val-Ala-Gln-Val-Ile-Ile-Pro-Ser-Thr-Tyr-  
220 225 230  
Val-Pro-Gly-Thr-Thr-Asn-His-Asp-Ile-Ala-Leu-Leu-Arg-Leu-His-Gln-Pro-Val-  
235 240 245 250  
Val-Leu-Thr-Asp-His-Val-Val-Pro-Leu-Cys-Leu-Pro-Glu-Arg-Thr-Phe-Ser-Glu-  
255 260 265 270  
Arg-Thr-Leu-Ala-Phe-Val-Arg-Phe-Ser-Leu-Val-Ser-Gly-Trp-Gly-Gln-Leu-Leu-  
275 280 285  
Asp-Arg-Gly-Ala-Thr-Ala-Leu-Glu-Leu-Met-Val-Leu-Asn-Val-Pro-Arg-Leu-Met-  
290 295 300 305 306  
Thr-Gln-Asp-Cys-Leu-Gln-Gln-Ser-Arg-Lys-Val-Gly-Asp-Ser-Pro-Asn-Ile-Thr-  
310 315 320  
Glu-Tyr-Met-Phe-Cys-Ala-Gly-Tyr-Ser-Asp-Gly-Ser-Lys-Asp-Ser-Cys-Lys-Gly-  
325 330 335 340  
Asp-Ser-Gly-Gly-Pro-His-Ala-Thr-His-Tyr-Arg-Gly-Thr-Trp-Tyr-Leu-Thr-Gly-  
345 350 355 360  
Ile-Val-Ser-Trp-Gly-Gln-Gly-Cys-Ala-Thr-Val-Gly-His-Phe-Gly-Val-Tyr-Thr-  
365 370 375  
Arg-Val-Ser-Gln-Tyr-Ile-Glu-Trp-Leu-Gln-Lys-Leu-Met-Arg-Ser-Glu-Pro-Arg-  
380 385 390 395  
Pro-Gly-Val-Leu-Leu-Arg-Ala-Pro-Phe-Pro  
400 405 406

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Fig. 2

SEQ ID NO:2 (DNA primer for preparation of L305V-FVII):

5'-CGT GCC CCG GGT GAT GAC CCA GGA C-3' ;

SEQ ID NO:3 (DNA primer for preparation of L305V-FVII):

5'-GTC CTG GGT CAT CAC CCG GGG CAC G-3' ;

SEQ ID NO:4 (DNA primer for preparation of K337A-FVII):

5'-CGG ATG GCA GCG CGG ACT CCT GCA AGG G-3' ;

SEQ ID NO:5 (DNA primer for preparation of K337A-FVII):

5'-CCC TTG CAG GAG TCC GCG CTG CCA TCC G-3' ;

SEQ ID NO:6 (DNA primer for preparation of V158D-FVII):

5'-GTG GGG GGC AAG GAC TGC CCC AAA GGG G-3' ;

SEQ ID NO:7 (DNA primer for preparation of V158D-FVII):

5'-CCC CTT TGG GGC AGT CCT TGC CCC CCA C-3' ;

SEQ ID NO:8 (DNA primer for preparation of E296V/M298Q-FVII):

5'-GCC ACG GCC CTG GTG CTC CAG GTC CTC AAC GTG CCC-3' ;

SEQ ID NO:9 (DNA primer for preparation of E296V/M298Q-FVII):

5'-GGG CAC GTT GAG GAC CTG GAG CAC CAG GGC CGT GGC-3' ;

SEQ ID NO:10 (DNA primer for preparation of S314E-FVII):

5'-GCC TGC AGC AGG AAC GGA AGG TGG GAG ACT CC-3' ;

SEQ ID NO:11 (DNA primer for preparation of S314E-FVII):

5'-GGA GTC TCC CAC CTT CCG TTC CTG CTG CAG GC-3' ;

SEQ ID NO:12 (DNA primer for preparation of F374Y-FVII):

5'-CGC AAC CGT GGG CCA CTA TGG GGT GTA CAC C-3' ;

SEQ ID NO:13 (DNA primer for preparation of F374Y-FVII):

5'-GGT GTA CAC CCC ATA GTG GCC CAC GGT TGC G-3' .